CLAIMS

1. A radar apparatus or like for forming detection image data from real sweep data successively formed based on a detection signal received by an antenna, and interpolated sweep data that is interpolated between adjacent pieces of the real sweep data in an azimuth direction, the device comprising interpolated sweep azimuth calculator for calculating a sweep azimuth of an interpolated sweep formed between a current real sweep and the previous real sweep based on a sweep azimuth of the current real sweep and a sweep azimuth of the previous real sweep, and sweep data former for calculating interpolated sweep data between current real sweep data and the previous real sweep data based on the current real sweep data and the previous real sweep data, wherein sweep data is formed based on the calculated interpolated sweep data and the real sweep data.

2. The radar apparatus or like according to claim 1, wherein the interpolated sweep data is composed of a linearly interpolated value between the previous real sweep data and the current real sweep data present on the same position in a sweep distance direction.

3. The radar apparatus or like according to claim 1 or 2, wherein the sweep data former comprises corrected sweep data former for, when, among a plurality of pieces of data of the real sweep data arranged in a distance direction, solitary data having a value larger than or equal to a predetermined threshold value is present in a predetermined range, converting the solitary data into corrected real sweep data, and corrected interpolated sweep data calculator for calculating corrected interpolated sweep data based on the corrected real sweep data formed by the corrected real sweep data former, and forms the sweep data based on the corrected real sweep data and the corrected interpolated sweep data.

4. A radar apparatus or like for forming detection image data from real sweep data successively formed based on a detection signal received by an antenna, and interpolated sweep data that is interpolated between adjacent

5　pieces of the real sweep data in an azimuth direction, the device comprising corrected sweep data former for, when, among a plurality of pieces of data of the real sweep data arranged in a distance direction, solitary data having a value larger than or equal to a predetermined threshold value is present in a predetermined range, converting the solitary data into corrected real sweep

10　data, and corrected interpolated sweep data calculator for calculating corrected interpolated sweep data based on the corrected real sweep data formed by the corrected real sweep data former, wherein sweep data is formed based on the corrected real sweep data and the corrected interpolated sweep data.

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5. A sweep data forming method for a radar apparatus or like which forms detection image data from real sweep data successively formed based on a detection signal received by an antenna, and interpolated sweep data that is interpolated between adjacent pieces of the real sweep data in an azimuth

20　direction, the method comprising the steps of calculating a sweep azimuth of an interpolated sweep formed between a current real sweep and the previous real sweep based on a sweep azimuth of the current real sweep and a sweep azimuth of the previous real sweep, calculating interpolated sweep data between current real sweep data and the previous real sweep data based on

25　the current real sweep data and the previous real sweep data, and forming the sweep data based on the calculated interpolated sweep data, the real sweep data, and the sweep azimuth.

6. A sweep data forming method for a radar apparatus or like which forms

30　detection image data from real sweep data successively formed based on a

detection signal received by an antenna, and interpolated sweep data that is interpolated between adjacent pieces of the real sweep data in an azimuth direction, the method comprising the steps of, when, among a plurality of pieces of data of the real sweep data arranged in a distance direction, solitary data having a value larger than or equal to a predetermined threshold value is present in a predetermined range, converting the solitary data into corrected real sweep data, calculating corrected interpolated sweep data based on the corrected real sweep data, and forming the sweep data based on the corrected real sweep data and the corrected interpolated sweep data.